

REMARKS

The claims being prosecuted herein are independent claim 2 and claims 3 and 4 dependent therefrom. Applicants have amended Claim 2 to clarify the present invention.

As now amended, Claim 2 is to an optical connector socket that has a body with a socket-side optical device installed therein and an insertion section to which a connected optical connector plug is inserted. A cover is provided on the body that has a front frame section, and the front frame section has an opening section communicating with the insertion section. A shutter is openably and closably attached to the cover for closing the opening section, and a helical spring provided that always elastically urges the shutter in a closing direction, against a back surface of the frame section. The opening section has an outside dimension greater than the outside dimension of the optical connector plug inserted into the cover and smaller than the outside dimension of the shutter, such that the helical spring urges the shutter so as to bring all the periphery of the shutter into abutment with a back surface of the first frame section. A guide projection is provided at the inside of the insertion section of the body for guiding the inserted optical connector plug toward the socket-side optical device with the guide projection becoming narrower toward the backside of the insertion section. Such an arrangement is not taught or suggested in the references cited.

In the Office Action, Claims 2 and 4/2 were rejected as obvious under 35 U.S.C. 103(a) in view of a combination of Yang et al. (U.S. 6,652,152) and Suverison et al. (U.S. 4,993,803) and Claims 2, 3, 4/2 and 4/3 were rejected as obvious in view of a combination of Yang et al. and

Miyachi et al. (U.S. 6,767,138). Reconsideration and removal of these rejections are respectfully requested in view of the present amendment to Claim 2 and the following remarks.

In the Office Action, it is alleged that Yang shows a socket connector body with a socket-side optical device and an insertion section for insertion of a connected optical plug, and a cover on the body having an opening section and a shutter attached to the cover for closing the opening section. It is also alleged that an elastic member always elastically urges the shutter in the closing direction, and that the opening section has an outside dimension greater than the outside dimension of the optical connector and smaller than the outside dimension of the shutter.

In the Yang device, however, the door or shutter 33 is itself flexible and formed of an elastic material, such as plastic or rubber. The door itself is contacted and deformed when a plug is inserted and restored to original state when the external force is removed. In the present claimed socket, a helical spring is used to elastically urge the shutter in a closing direction. Flexing of the door itself, as in Yang, would obviously wear the door and lead to cracking or failure of the door.

Also, in the present claimed socket, the opening section is formed as a front frame section and all of the periphery of the shutter seals against a back surface of the frame section (see Fig. 3). With all of the periphery of the shutter brought into abutment with a back surface of the front frame section, as now called for in amended Claim 2, leakage of light is prevented, and also such sealing prevents the intrusion of dust from the opening section. There is no such sealing in the Young connector assembly. Note in Fig. 4 of Yang that the upper edge of the elastic door does not contact

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the back surface of anything but merely is adjacent a lower surface of the top wall (311) of the insert body (31).

The teachings of Suverison et al. and Miyachi also do not teach the structure and advantages of the present optical connector socket and do not cure the deficiencies of the Yang reference.


In view of the present amendment to Claim 2 and the above remarks, it is believed that Claims 2-4 are patentable and that this application is now in condition to pass to issue.

If there are any issues of a minor nature remaining, the Examiner is urged to contact Applicants' attorney, the undersigned, at Area Code (202) 659-2930.

In the event that any additional fees are due in connection with this paper, please charge our Deposit Account No. 01-2340.

Respectfully submitted,

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